

MINELCO®

Micro-Miniature ROTARY SELECTOR SWITCH



ACTUAL
SIZE

\$8 (for one)

The MINELCO Type SW32 micro-miniature O-ring sealed rotary selector switch provides control of several circuits in an absolute minimum of space. Sturdy detent action gives positive positioning at 60-degree intervals. This switch is ideally suited for miniaturized electronic and communications equipment and testing circuitry.

Contacts are made of silver for low contact resistance which is rated at .05 ohm before, during, and after life at rated load.

Positions are selected by using a small screw driver. A positive stop is factory-installed to limit the number of positions. The unit is also available without a stop permitting unlimited continuous rotation in either direction.

Two standard styles are available. Model SW32 is designed for printed-circuit board mounting and has 1/2-inch tinned terminal leads. Model SW37 is the same micro-miniature rotary switch designed for mounting on a panel with 1/8" maximum thickness, and has six solder-lug terminals. Teflon-insulated leads are available on request, with a standard length of four inches.

The stainless-steel case measures .350 inch in diameter and is completely sealed against moisture and dust. All epoxies used are non-organic.

FEATURES:

- **Both models:** Single pole, 2 to 6 positions, 60° indexing, single section.
Note: A number behind the dash (—) indicates the number of positions wanted; i.e. SW32-4
- **Electrical Rating:** 0.25 ampere 28 volts d-c maximum standard; (0.50 ampere 28 volts d-c maximum available on request; 1.00 amperes with limited duty cycle also available).
- **Dielectric Strength:** 500 volts d-c (case-to-contact and contact-to-contact) before and after life at rated load.
- **Leakage Resistance:** Greater than 1,000 megohms (case-to-contact and contact-to-contact) before and after life at rated load.
- **Capacitances:**
Open contact to case: less than 1 μf .
Closed contact to case: less than 5 μf .
Contact to contact (both open): less than 1 μf .
Contact to contact (one closed): less than 2 μf .
- **Action:** detent action, 60° indexing.
- **Mounting:** panel mounting and printed-circuit mounting. Stainless-steel nuts and lockwashers will be supplied as standard mounting hardware for bushing type. Specially indexed dial-plates for Model SW37 are also available.
- **Contacts:** break-before-make

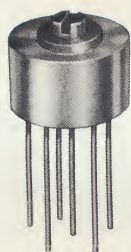
MINELCO

MINIATURE ELECTRONIC COMPONENTS CORP.
600 South Street Holbrook, Massachusetts

Tel.: 963-7717, Area 617 TWX: 617-963-7660

REPRESENTED BY

- **Temperature:** from -65°C to $+125^{\circ}\text{C}$.
- **Humidity:** 95% relative humidity.
- **Vibration:** 20 G's 10 to 2,000 cycles.
- **Shock:** 50 G's.



TOP VIEW

BOTTOM VIEW

SW32-2

SW32-3

SW32-4

TOP VIEW

BOTTOM VIEW

SW32-5

SW32-6

Legend:

- C = Common Terminal
- M = For Mounting only
- = Red Dot

Notes:

- Numerals indicate active switch positions
- All symbols for reference only

Technical drawing of the Model SW37 probe assembly, showing three views: top, side, and bottom.

Top View (Probe Head):

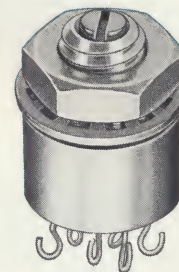
- Shaft: .100 DIA.
- Slot: .025 WIDE, .030 DEEP
- Hexagonal Head Diameter: .350
- Head Thickness: 7/32 FLATS, 1/16 THICK

Side View (Probe Assembly):

- Thread: 10-32 NF-
- Nut Height: .190
- Probe Head Height: .230
- Maximum Distance between Nut and Head: .100 MAX.
- Probe Head Label: MODEL SW37

Bottom View (Probe Head):

- Solder Lug Terminals (6)



Litho in U.S.A. 10M8U464FI

Micro-Miniature

DRY-CIRCUIT

1/4-INCH RELAY

\$20 (for one)

- Only 1/4-inch in diameter
- Single-pole double-throw
- High performance under environmental extremes
- Competitively priced

ENVIRONMENTAL SPECIFICATIONS

Operating temperature -65 C. to +125 C.
 Humidity Not applicable, hermetically sealed
 Vibration 20G. 5-2000 cps
 Shock 50G, 11 milliseconds

MECHANICAL SPECIFICATIONS

Size 1/4" diam., 1/2" long Contact materials:
 Weight 0.075 oz. a wide variety available
 Case Epoxy-coated metal Coil Teflon-covered magnet wire
 Contacts: Single Form C (SPDT) Case style:
 Mounting cylindrical, glass header, her-
 5 leads 60° apart on .120" diam. metically sealed
 Insulation Operating time: less than 2.5 ms
 Release time: less than 2.5 ms
 Life: 100,000 cycles at rated load
 Teflon®, KEL-F®, Glass

ELECTRICAL SPECIFICATIONS

COIL (at room temperature) for standard voltages

Max. continuous power .0315 watt Max. pull-in power . .0140 watt
 Max. intermittent power .0368 watt Min. drop-out power .0024 watt

Insulation Test: 500 volts, d-c

Insulation R (coil to case or contacts) : 1,000 megohms

Power at rated voltage (for standard 6, 12, 24, or 28 volts d-c) : 0.280 watt

Note: Other power ratings available on special order.

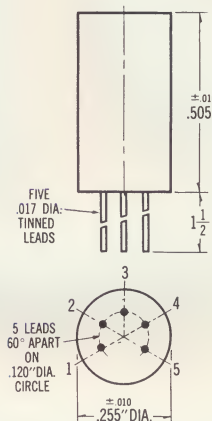
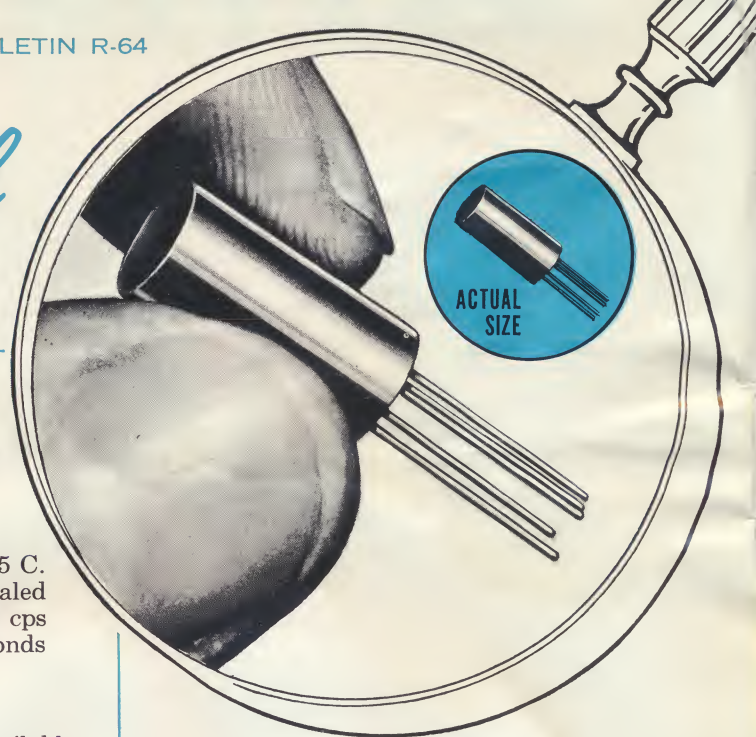
CONTACTS:

Current: Specify load current for optimum choice of materials (max. 50 milliamps).

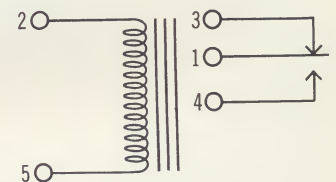
Voltage: 28 volts non-ind. max.

COIL (at room temperature)

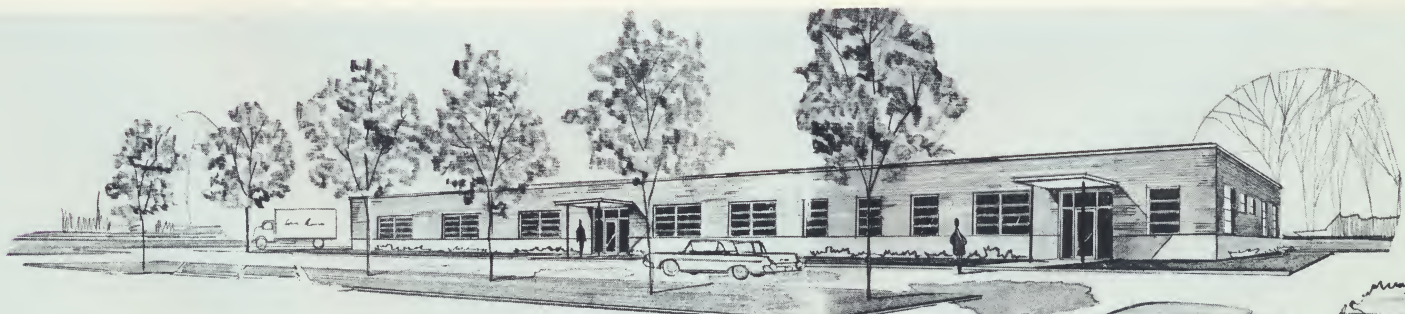
	6 v.d-c	12 v.d-c	24 v.d-c	28 v.d-c		6 v.d-c	12 v.d-c	24 v.d-c	28 v.d-c
Nominal resistance	130 ohm	520 ohm	1950 ohm	2800 ohm	—	—	—	—	—
Max. continuous V.	6.4 v	13 v	25.5 v	30 v	Max. continuous I.	49 ma.	25 ma.	13 ma.	10.5 ma.
Max. intermittent V.	6.8 v	14 v	27 v	32 v	Max. intermittent I.	53 ma.	27 ma.	13.8 ma.	11.5 ma.
Max. pull-in V.	4.3 v	9 v	16 v	20 v	Max. pull-in I.	33 ma.	17 ma.	8.2 ma.	7 ma.
Min. drop-out V.	1.8 v	3.5 v	7 v	8 v	Min. drop-out I.	14 ma.	7 ma.	3.5 ma.	3 ma.



LEAD IDENTIFICATION



1. Common contact
2. Coil
3. Normally closed contact
4. Normally open contact
5. Coil



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